

ABSTRACT

Treating solution for surface treatment of metal to treat one metal material selected from the group consisting of ferriferous material, zinciferous material, aluminiferous material and magnesiferous material or to treat two or more metal materials selected from the group consisting of ferriferous material, zinciferous material, aluminiferous material and magnesiferous material at the same time, wherein the aqueous surface treating solution contains from 5 to 5000 ppm of at least one compound selected from the group consisting of zirconium compound and titanium compound by the metal element, and from 0.1 to 100 ppm of free fluorine ion, further the pH of the treating solution is from 2 to 6. To the treating solution, calcium compound, magnesium compound, strontium compound, nitric acid group, oxygen acid and/or salt of oxygen acid, polymer compound and surface active agent can be added.